

551, 473

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date  
21 October 2004 (21.10.2004)

PCT

(10) International Publication Number  
**WO 2004/090781 A1**

(51) International Patent Classification<sup>7</sup>: **G06F 21/00, 1/00, H04M 1/725**

(21) International Application Number: **PCT/JP2004/004582**

(22) International Filing Date: **31 March 2004 (31.03.2004)**

(25) Filing Language: **English**

(26) Publication Language: **English**

(30) Priority Data: **0307628.8 2 April 2003 (02.04.2003) GB**

(71) Applicant (for all designated States except US): **NEC CORPORATION [JP/JP]; 7-1, Shiba 5-chome, Minato-ku, Tokyo 1088001 (JP).**

(72) Inventor; and

(75) Inventor/Applicant (for US only): **PARKER, John [GB/GB]; c/o NEC Technologies (UK) Ltd., Level 3, The Imperium, Imperial Way, Reading, Berkshire RG20TD (GB).**

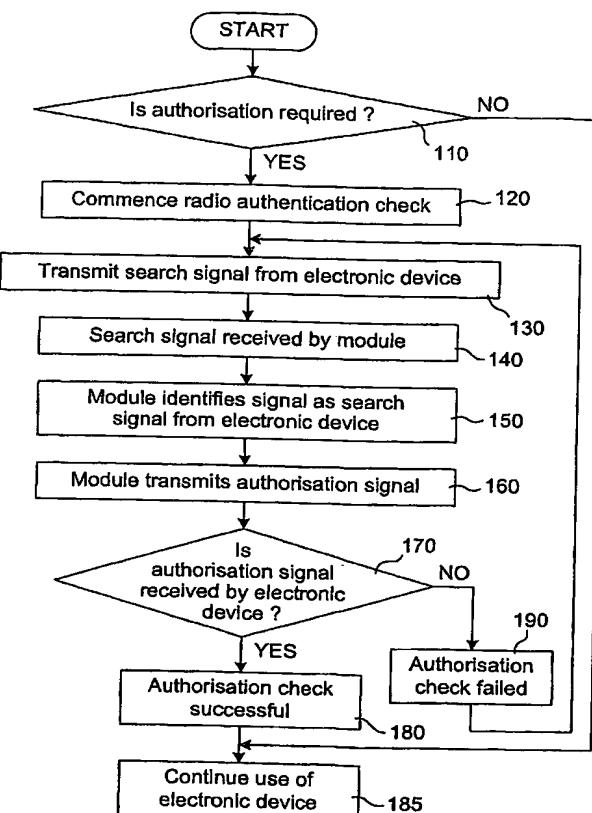
(74) Agents: **MIYAZAKI, Teruo et al.; 8th Floor, 16th Kowa Bldg., 9-20, Akasaka 1-chome, Minato-ku, Tokyo 1070052 (JP).**

(81) Designated States (unless otherwise indicated, for every kind of national protection available): **AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.**

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): **ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, ZW).**

[Continued on next page]

(54) Title: APPARATUS FOR AUTHORISING ACCESS TO AN ELECTRONIC DEVICE



(57) Abstract: Commonly used mobile devices provide authenticated access to the device through the manual entry of personal identification numbers (PINs). Third generation devices will potentially contain a large amount of user sensitive data and there is a need for increased security on the devices to prevent unauthorised access. However, increasing the number of manually entered PINs or passwords is inconvenient to the user. These problems are overcome providing authorisation to access the electronic device via a series of radio signals between the electronic device and a radio module which is paired to the device. The module is carried separately from the device and, when authorisation is required, the device automatically attempts to detect the presence of the radio module. In order to detect the presence of the module, the device transmits a search signal to the module (130). The radio module receives (140) the search signal from the device and transmits an authorisation signal in response (100). On receiving (170) the authorisation signal the electronic device provides the user with access to the restricted application (185). If the electronic device does not receive an authorisation signal from the module, access to the electronic device is initially refused and the user may be required to provide further authorisation, for example using a PIN, in order to access the restricted application.



TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,  
ML, MR, NE, SN, TD, TG).

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

**Published:**

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*